. '	<u>ئ</u>		,	OIPE		MODIFIED PTO/SB/08 A & B (06-0			
S	Substitute for Form 1449 A & B/PTO		-7	MAR 2 5 2004	Complete if Known				
"			t t	K i	Application Number	09/986,332			
	<u>INFORM</u>	LATION DIS	<u>CLOS</u>	TRE 6	Confirmation Number	5542			
	STATEM	MENT BY A	PLIC	ANTORADEMARK	Filing Date	November 8, 2001			
				GADE	First Named Inventor	KIYOKU, HIROYUKI			
1	(use as	many sheets as i	necessar	y)	Art Unit	1765			
				_	Examiner Name	Anderson, Matthew A.			
	Sheet	1	of	1	Attorney Docket Number	Q66212			

U.S. PATENT DOCUMENTS									
Examiner	Cite	Document Number			Publication Date				
Initials*	No.1	Number		nd Code <sup>2</sup> f known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document			Cited Document
MA		US 5,620,557	A 04-15-1997		04-15-1997	Katsuhide MANABE et al.			
	1	US		~					
		_US \			7			$\overline{}$	
		<b>US</b>							
		Ďζ					\		
		US <b>\</b>							$\overline{}$
		US							
	1	US					1		

FOREIGN PATENT DOCUMENTS								
Examiner	Cite	Foreign Patent Docum		ient	Publication Date	Name of Patentee or		
Initials*	No.	Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>3</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation <sup>6</sup>	
MA		JP	7-165498		06-27-1995	Toyoda Gosei Co. LTD.	Abstract + JPO Translation	
nnA		Љ	7-202265		08-04-1995	Mitsubishi Cable Ind. LTD.	Abstract + JPO Translation + US 5620557	
		_		Ļ				
			<del></del>					
$\overline{}$								
	$\overline{}$		<b>,</b>					
			<u> </u>					
	$\overline{}$							

		NON PATENT LITERA				
Examiner Initials*	Cite No.!  Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.					
$-\!$						

Examiner Signature Matthe and Date Considered 6/7/04

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>3</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.

			Atty. Docket No.	Serial N	lo.:		
Form PTO-1449 U.S. Department of Commerce (Rev. 2-32) Patent & Trademark Office			Q66212	Confirm	nation No.:	To be Assigned	
	ON DISCLOSURE STATI everal sheets if necessary)	Applicant: Hiroyuki KIYOKU, et al.					
			Filing Date: 11/8/2001	Group:	1765	96/6	
· · ·		U.S. PATE	NT DOCUMENTS	<del>_</del>			
Examiner Initial	Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)	
INVA	4,482,422	11/13/1984	McGinn et al.	117	95		
INNAA	4,578,142	03/25/1986	Corboy et al.	117	89		
MA	4,908,074	03/13/1990	Hosoi et al.	148	33.2		
MA	5,239,188	08/24/1993	Takeuchi et al.	257	76		
n/A	5,247,533	09/21/1993	Okazaki et al.	372	45		
ilWA	5,290,393	03/01/1994	Nakamura et al.	438	509		
n/A-	5,364,815	11/15/1994	Osada	438	489		
iAA-	5,679,152	10/21/1997	Tischler et al.	117	97		
i// <del>///</del>	5,709,745	01/20/1998	Larkin et al.	117	96		
MA.	5,727,008	03/10/1998	Koga et al.	372	43		
nnA	5,764,673	06/09/1998	Kawazu et al.	372	45		
MA.	5,766,695	06/16/1998	Nguyen et al.	427	553		
MA	5,773,369	06/30/1998	Hu et al.	438	746		
NA-	5,789,265	08/04/1998	Nitta et al.	438	22		
NA	5,880,485	03/09/1999	Marx et al.	257	94		
n/Aft.	6,051,849	04/18/2000	Davis et al.	257	103	02/27/1998	
MNA.	2001/0007242 A1 .	07/12/2001	Davis et al.	117	104		
MUA	2001/0009167 A1	07/26/2001	Davis et al.	148	33		
		FOREIGN PA	TENT DOCUMENTS				
	Document	Date	Country	Class	Sub- class	Translation Yes/No	
nA	7-273367 A	10/20/1999	JAPAN	H01L	33/00		
MAH	5-343741 A	12/24/1993	JAPAN	H01L	33/00		
EXALL:	5-55631 A	03/05/1993	JAPAN	H01L	33/00		
i/\/H	8-64791 A	03/08/1996	JAPAN	H01L	27/12		
iNA-	7-201745 A	08/04/1995	JAPAN	H01L	021/205		
NA-	WO 97/11518	03/27/1997	PCT	H01S	3/18	Yes-EP 0 852 416 A	
MH	0 852 416 A1	07/08/1998	EP	H01S	3/18		
MA	WO 99/44224	09/02/1999	PCT	HOIL	21/20		
	OTHER DOCUME	NTS (Including	Author, Title, Date, Pert	inent Page	s, Etc.)		
	International Search Re	port, PCT/US98	3/01640, July 14, 1998			-	
1114			's Motion for Partial Sun	mary Jude	ment, North	Carolina State	
<i>[/\Vt</i> V(			rporation and Nichia Am				
```			trict of North Carolina Southern Division, Dec. 11, 2000				
MAG	International Search Re						
MA	Lester et al, "High Dislo Lett., 66, 1995, pp. 1249		s in High Efficiency GaN	l-Based Lig	ht-Emitting	Diodes", Appl. Phys.	
MA	Nakamura, Shuji and G Springer, 1997, pp. 282	•	ne Blue Laser Diode: Gal	l Based Lig	ght Emitters	and Lasers, Berlin:	
EXAMINER:	TITIES MILL		DATE CONSIDE	RED:	6/091	104	
	tial if citation considered, wand not considered. Include		tation is in conformance v	vith MPEP	609; draw l	ine through citation if	

الأيدا

	***		Atty. Docket No.	Serial N	lo.:	
Form PTO-1449 U.S. Department of Commerce (Rev. 2-32) Patent & Trademark Office			Q66212	Confirm	Confirmation No.: To be Assigned	
	ON DISCLOSURE STATI everal sheets if necessary)	Applicant: Hiroyuki KIYOKU, et al.				
			Filing Date: 11/8/200	l Group:	1765	
	· · · · · · · · · · · · · · · · · · ·	U.S. PATE	NT DOCUMENTS			
Examiner	Document Number	Date	Name	Class	Sub-	Filing Date
Inițial					Class	(if appropriate)
100	RE 34,861	02/14/1995	Davis et al.	117	86	
vux.	4,946,547	08/07/1990	Palmour et al.	117	97	
MAT	4,912,064	03/27/1990	Kong et al.	438	507	
MA	4,865,685	09/12/1989	Palmour	438	718	
MA	4,522,661	06/11/1985	Morrison et al.	148	33.2	
MA	5,815,520	09/29/1998	Furushima	372	45	
mu_	5,786,606	07/28/1998	Nishio et al.	257	103	
and	5,760,426	06/02/1998	Marx et al.	257	190	
aug-	5,549,747	08/27/1996	Bozler et al.	117	43	
AUA.	5,397,736	03/14/1995	Bauser et al.	117	56	
mu	5,389,571	02/14/1995	Takeuchi et al.	117	89	
MA	5,122,845	06/16/1992	Manabe et al.	257	76	
MIL	4,876,210	10/24/1989	Barnett et al.	117	58	
M4	4,651,407	03/24/1987	Bencuya	438	193	
MA.	5,877,070	03/02/1999	Goesele et al.	438	458	
DAH-	5,710,057	01/20/1998	Kenney	438	406	
MA	4,127,792	11/28/1978	Nakata	313	500	
		FOREIGN PA	TENT DOCUMENTS			
	Document	Date	Country	Class	Sub-	Translation
					class	Yes/No
MA	0 551 721 A2	07/21/1993	EP	H01L	21/20	
	OTHER DOCUME	NTS (Including	Author, Title, Date, Pe	ertinent Page	s, Etc.)	
11/1/44	Zheleva et al., Dislocati	on Density Red	uction Via Lateral Epite	xy in Selecti	ively Grown	GaN Structures, Appl.
00001	Phys, Lett. Vol. 71, No.	17, October 27	, 1997, pp. 2472-2474			
(1111	Doverspike et al., The E	ffect of GaN an	d AIN Buffer Layers on	GaN Film P	roperties Gr	rown on Both C-Plane
1114	and A-Plane Sapphire, J	ournal of Elect	ronic Materials, Vol. 2	4, No. 4, 199	5, pp. 269-2	73
	Kuznia et al., Influence				Single Cryst	al GaN Over Sapphire
Vouv	Substrates, J. Appl. Phy-					
	Watanabe et al., The Gre			Substrate U	sing AIN As	An Intermediate Layer
/////	Journal of Crystal Grow					
MA	Chen et al., Silicon-on-I		How, and When, AIP (	Conterence P	roceedings,	Vol. 167, No. 1,
<u> </u>	September 15, 1988, pp.		- Parkert 10 at 10	- III: 2 O 1	4. C. V. D.	flation 4DID C
11114-	Amano et al., Metalorgo					i Using an AIN Bujjer
11/1//	Layer, Applied Physics					14.1. I B
INAML	Yoshida et al., Improven					
UVVOT	Epitaxially Grown GaN		AIN-Coalea Sappnire	suosiraies, P	sppuea rnys	ies Leilers, VOI. 42,
No. 5, March 1, 1983, pp. 427-429						Vol. 20. No. 10A
Nakamura, GaN Growth Using GaN Buffer Layer, Japanese Journal of Applied Physics, Vol. 30, No. 10A, October 1991, pp. 1/21705-L1707						
EXAMINER:	loute Under	<u> </u>	DATE CONSIDI	ERED: (	1001	04
- 10	to the second		<u> </u>		1 7	
	ial if citation considered, w				609; draw I	ine through citation if
	nd not considered. Include					

<u>.4</u>

			Sneet 3 of 3					
<u>-</u>		Atty. Docket No.	Serial No.:					
Form PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent & Trademark Office	Q66212	Confirmation No.: To be Assigned					
	ON DISCLOSURE STATEMENT everal sheets if necessary)	Applicant: Hiroyuki KIY	OKU, et al.					
		Filing Date: 11/8/2001	Group: 1765					
	OTHER DOCUMENTS (Including	g Author, Title, Date, Pertin	nent Pages, Etc.)					
Examiner Initial	Document							
International Search Report, PCT/U		9/12967, October 18, 1999						
MA	71(9), 1 September 1997, pp. 1204-120	06	elective Area Epitaxy", Appl. Phys. Lett.					
MA-	Jpn. J. Appl. Phys., Vol. 36, Part 2, No	. 7B, 15 July 1997, pp. 899	Pensity by Hydride Vapor Phase Epitaxy", -902					
MA-	Nam et al., "Growth of GaN and Al <sub>0.2</sub> G Epitaxy", Jpn. J. Appl. Phys., Vol. 36, 1	a <sub>0.8</sub> N on Patterned Substra	tes Via Organometallic Vapor Phase					
AM		and Al <sub>0.2</sub> Ga <sub>0.8</sub> N on GaN/AII	N/6H-SiC(0001) Multilayer Substrates Via					
HIA -		by of GaN for Electron Field Emission Devices", Journal of Crystal						
MIH	Weeks et al, "GaN Thin Films Deposite	ited Via Organometallic Vapor Phase Epitaxy on a(6H)-SiC(0001) Using IIN Buffer Layers", Appl. Phys. Lett. 67(3), 17 July 1995, pp. 401-403						
ald	Kato et al., "Selective Growth of Wurtz	zite GaN and A1 <sub>x</sub> Ga <sub>1-x</sub> N on GaN/Sapphire Substrates by Metalorganic stal Growth, 144, 1994, pp. 133-140						
		chanisms in Selective Metalorganic Chemical Vapor Deposition", Ipn.						
	Nakamura et al., InGaN/GaN/AlGaN-E Superlattices, Jpn. J. Appl. Phys., vol.	Based Laser Diodes With M						
AAA-			pplied Physics Letters, Vol. 75, No. 2, July					
MA		ew Approach for Lateral Growth of Gallium Nitride Films, Journal of February 1999, pp. L5-L8						
MH	Zheleva et al., Pendeo-Epitaxy-A New	www.Approach for Lateral Growth of GaN Structures, MRS Internet Journal 1999, Online!, Vol., 4S1, No. G3.38, November 30, 1998-December 4,						
MH	Nakamura et al., InGaN/GaN/AlGaN-E Transverse Mode, Jpn. J. Appl. Phys.,		on GaN Substrates With a Fundamental 8, pp. L1020-L1022					
MH		V Laterally Overgrown by I	Metalorganic Chemical Vapor Deposition,					
MA	Sakai et al., Transmission Electron Mic	Sakai et al., Transmission Electron Microscopy of Defects in GaN Films Formed by Epitaxial Lateral Overgrowth, Vol. 73, No. 4, July 27, 1998, pp. 481-483						
MA	Nakamura et al., High-Power, Long-Li	fetime InGaN/GaN/AlGaN-	Based Laser Diodes Grown on Pure GaN					
MA	Nam et al., Lateral Epitaxial Overgrow	Substrates, Jpn. J. Appl. Phys., Vol. 37, March 15, 1998, pp. L309-L312  Nam et al., Lateral Epitaxial Overgrowth of GaN Films on SiO <sub>2</sub> Areas Via Metalorganic Vapor Phase Epitaxy  Journal of Electronic Materials, Vol. 27, No. 4, 1998, pp. 233-237						
914		ion of SiC Films on Large-Area Si Wafers by APCVD-Temperature						
MA	Nam et al., Lateral Epitaxy of Low Def	xy of Low Defect Density GaN Layers Via Organometallic Vapor Phase Epitaxy,						

Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw-line through citation if EXAMINER: not in conformance and not considered. Include copy of this form with next communication.

Appl. Phys. Lett., Vol. 71, No. 18, November 3, 1997, pp. 2638-2640

**EXAMINER:**